

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) Pump apparatus (1) including:  
a first container including a chamber (304), an inlet (302) and an outlet (305), the chamber being pressurisable to effect discharge through the outlet;

a control apparatus for causing periodic pressurisation and depressurisation of the chamber in response to the level of liquid in the container,

wherein the control apparatus includes a pilot valve (318) located in a second container (310) connected to receive liquid from the first container when the level of liquid in the first container ~~reaches~~ rises to a first predetermined level, the pilot valve being configured to open to trigger a pressurisation/depressurisation cycle of the chamber of the first container in response to the liquid level in the second container falling below a second predetermined level, which triggers the depressurisation, the state of the pilot valve determining pressure within a portion (326) of the apparatus, and

a shuttle valve (340) configured to change state directly in response to the pressure within the portion of the apparatus, the state of the shuttle valve determining whether motive gas enters into, or is vented from, the first container, thereby implementing the pressurisation/depressurisation cycle.

2. (original) Pump apparatus according to Claim 1, wherein the outlet (305) includes a non-return valve intended to allow liquid to pass therethrough only when the pressure of the liquid exceeds a predetermined threshold.

3. (canceled)

4. (previously presented) Pump apparatus according to claim 1, wherein the second container (310) is relatively small compared with the first container (304).

5. (previously presented) Pump apparatus according to claim 1, wherein the second container (310) has its base at a relatively higher location than the base of the first container (304).

6. (currently amended) Pump apparatus (1) including:  
a first container including a chamber (304), an inlet (302) and an outlet (305), the chamber being pressurisable to effect discharge through the outlet;

a control apparatus for causing periodic pressurisation and depressurisation of the chamber in response to the level of liquid in the container,

wherein the control apparatus includes a pilot valve (318) located in a second container (310) connected to receive liquid from the first container when the level of liquid in the first container ~~reaches~~ rises to a first predetermined level, the pilot valve being configured to open to trigger a

pressurisation/depressurisation cycle of the chamber of the first container in response to the liquid level in the second container falling below a second predetermined level, which triggers the depressurisation, wherein the first (304) and second (310) containers are linked by a pipe or line (308) having a non-return valve (312).

7. (previously presented) Pump apparatus according to claim 1, further including a compressed air supply (320), the compressed air being used as the motive gas.

8. (previously presented) Pump apparatus according to claim 1, further including a compressed air supply (320), wherein the compressed air is supplied to or vented from a thruster cylinder (410) which operates to supply or vent steam for pressurisation/depressurisation of the first container (304).

9. (previously presented) Pump apparatus according to claim 1, further including another said pump apparatus connected in parallel to a first pump apparatus, each said pump having a further valve component (402, 404) connected to a line for venting the motive gas from at least the first container (304A, 304B) of each said pump, the further valves configured to open the venting valve (404A) of one said pump when the venting valve (404B) of the other said pump is closed.

10. (currently amended) Pump apparatus (500) including two pumps, each said pump respectively including:

a first container including a chamber (304), an inlet (302) and an outlet (305), the chamber being pressurisable to effect discharge through the outlet, and

a control apparatus (402, 404, 508) for causing periodic pressurisation and depressurisation of the chamber in response to the level of liquid in the container, said liquid having a high level and a low level, said low level triggering the depressurization, said control apparatus including a shuttle valve (340) configured to change state directly in response to the pressure within the portion of the apparatus, the state of the shuttle valve determining whether motive gas enters into, or is vented from, the first container, thereby implementing the pressurisation/depressurisation cycle; the apparatus being arranged so that when one said pump is discharging liquid, the other pump is receiving liquid through its respective inlet.

11. (original) Pump apparatus according to Claim 10, wherein the two pumps are connected together by means of a further valve component (402, 404) connected to a line for venting the motive gas from at least the first container of each said pump, the further valve configured to open the venting valve (404A) of one said pump when the venting valve (404B) of the other said pump is closed.

12. (previously presented) Pump apparatus according to Claim 10, wherein the two pumps are connected together by means of a further valve component having an automatic valve in the inlet line (302) of each said first chamber (304A, 304B), the valves arranged such that when the chamber (304A) of one said

pump is discharging, the chamber (304B) of the other said pump is receiving liquid through its inlet.

13. (canceled)

14. (previously presented) Pump apparatus according to claim 2, wherein the second container (310) is relatively small compared with the first container (304).

15. (canceled)

16. (previously presented) Pump apparatus according to claim 2, wherein the second container (310) has its base at a relatively higher location than the base of the first container (304).

17. (canceled)

18. (previously presented) Pump apparatus according to claim 4, wherein the second container (310) has its base at a relatively higher location than the base of the first container (304).

19. (previously presented) Pump apparatus according to claim 2, wherein the first (304) and second (310) containers are linked by a pipe or line (308) having a non-return valve (312).

20. (canceled)

21. (previously presented) Pump apparatus according to claim 1, wherein steam is used as the motive gas.